

PENURUNAN JUMLAH *Streptococcus mutans* DAN PENINGKATAN LEVEL KALSIUM PADA PLAK GIGI ANAK USIA 8-10 TAHUN SETELAH MENGONSUMSI MINUMAN PROBIOTIK (*Lactobacillus acidophilus* dan *Bifidobacterium*)

DECREASE OF *Streptococcus mutans* AND INCREASE OF CALCIUM LEVEL AT CHILDREN'S DENTAL PLAQUE AGES 8-10 YEARS AFTER PROBIOTIC CONSUMPTION (*Lactobacillus acidophilus* and *Bifidobacterium*)

ABSTRACT

Background: The prevalence of oral and dental problems in Indonesian children is still high. Primary precaution in high caries risk children *isn't* significantly reduce the number of dental caries, especially in East Java Province. Dental caries is an infectious progressive disease that caused by biofilm bacteria in the oral cavity. One of bacteria that cause caries is *Streptococcus mutans* which increased after the caries process was start. Probiotic is an alternative that can be used to prevent dental caries because high in calcium and has antibacterial agent. **Purpose.** This study aims to determine decrease of *Streptococcus mutans* and increase of calcium level *at children's dental plaque ages 8-10 years* after probiotic consumption (*Lactobacillus acidophilus* and *Bifidobacterium*). **Methods:** This research was a laboratory experimental study. Plaque was taken from children's *teeth* aged 8-10 years without systemic disease. Calcium levels are calculated with a spectrophotometer and *Streptococcus mutans* are calculated by using of colony forming unit (CFU). **Results:** After taking probiotic, calcium levels increased by 57.16 mg / kg and the amount of *Streptococcus mutans* decreased by 3.28 CFU / L. **Conclusion:** Probiotics can be an alternative of dental caries preventive with inhibit the number of *Streptococcus mutans* and increase calcium level.

Keywords: Probiotic, calcium, *Streptococcus mutans*,